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12831D LANCE MISSILE NUMBER 2233 ROUND NUMBER 379-DSL

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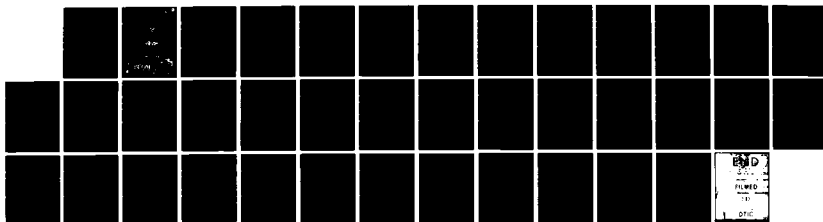
30 OCTOBER 1982(U) ARMY ELECTRONICS RESEARCH AND
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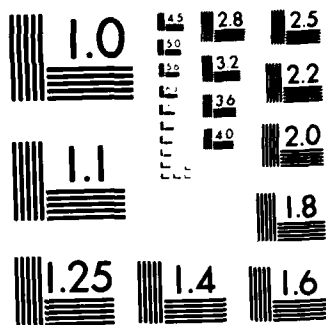
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INTERNATIONAL DATA REPORT

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REPORT NUMBER 175-051

30 October 1982

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ELECT
JAN 13 1983

INTERNATIONAL DATA REPORT
WITH LANCE AIRCRAFT, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

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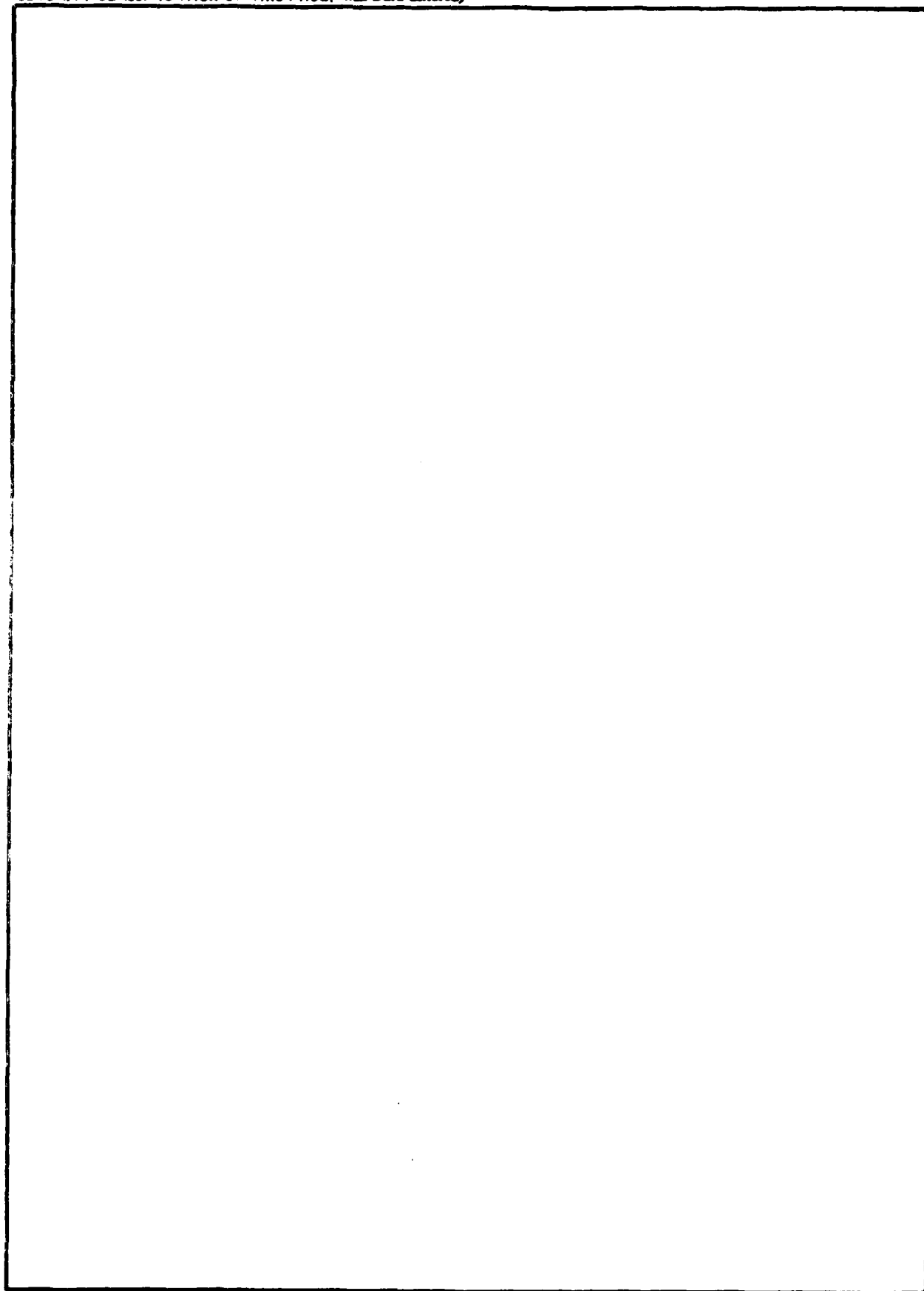
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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
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17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 12831D LANCE, Missile Number 2233, Round Number 379-DSL are presented in tabular form.		

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INTRODUCTION

12831D LANCE, Missile Number 2233, Round Number 370-DSL, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1700:47 MDT, 30 Oct 82. The scheduled launch time was 1700 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

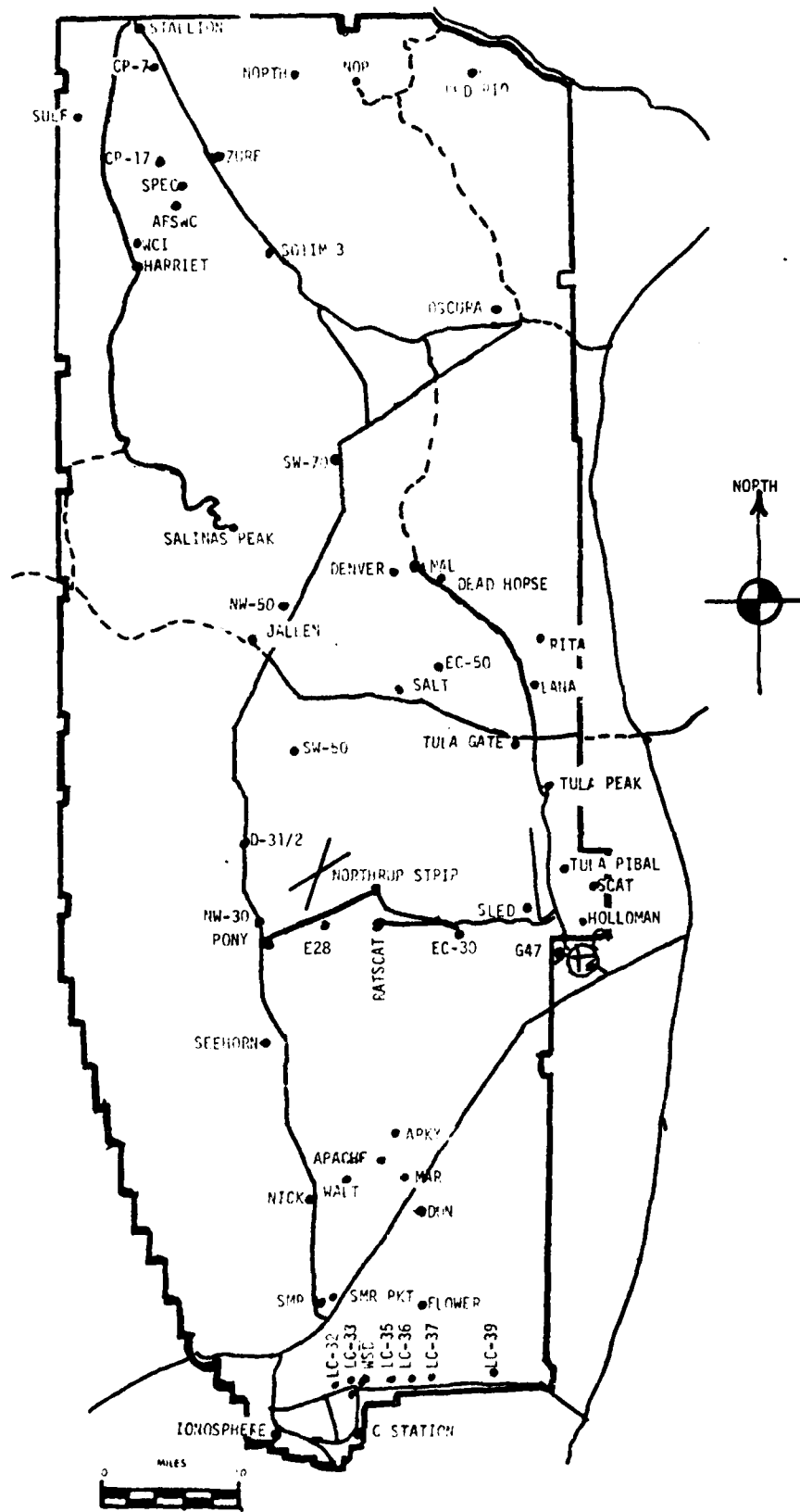
(1) Low level wind data were obtained from a single Theodolite pilot-balloon observation at:

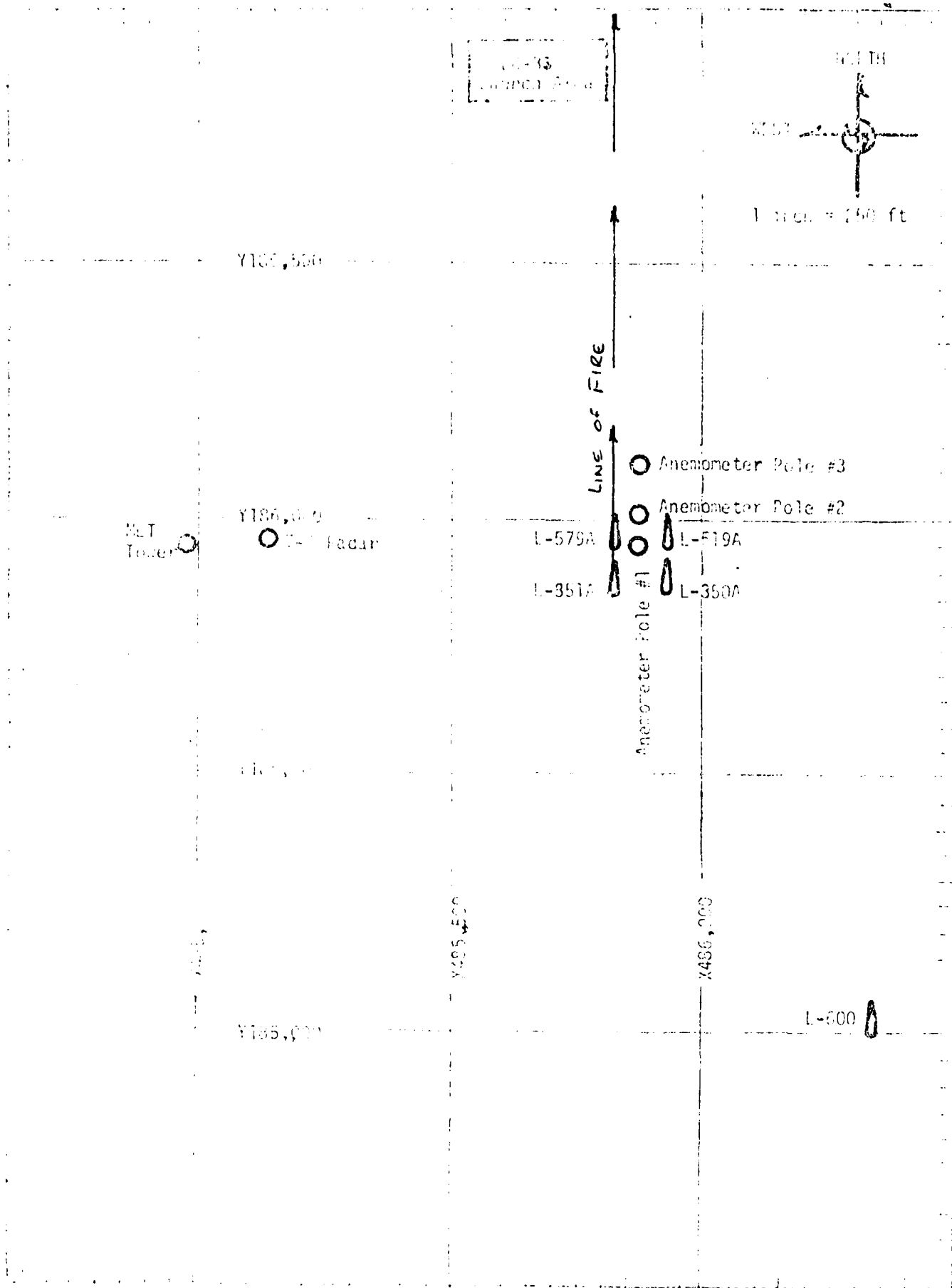
SITE AND ALTITUDE
LC-33 2760 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME
WSD (Launch area) 1650 MDT
JALLEN (Mid-Course) 1530 MDT
STALLION (Impact area) 1730 MDT

WSMR METEOROLOGICAL SITES





PROJECT SURFACE OBSERVATION

TABLE 1		STATION LC-33													
DATE 30 Oct 82		X= 484,982.64		Y= 185,957.73		H= 3995.00									
TIME M D I		PRESSURE mbs		TEMPERATURE OF		DEW POINT OF		RELATIVE HUMIDITY %		DENSITY gm/m ³		WIND		VISIBILITY	
												SPEED kts		CHARACTER kts	
												DIRECTION degs In			
1701		876.3		24.1		-2.6		17				240		02	

OBSTRUCTIONS TO VISIBILITY		CLOUDS						REMARKS		
		1st LAYER		2nd LAYER		3rd LAYER				
		AMT	TYPE	HGT	AMT	TYPE	HGT	AMT	TYPE	HGT
		3	CS	25,000						

PSYCHROMETRIC COMPUTATION

TIME:	1701
DRY BULB TEMP.	24.1
WET BULB TEMP.	10.5
WET BULB DEPR.	13.6
DEW POINT	-2.6
RELATIVE HUMID.	17

TABLE 2. LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1			POLE #2			POLE #3		
X485,874.29			X485,874.29			X485,874.29		
Y185,958.90			Y186,012.00			Y186,116.06		
H0018.74			H0033.17			H0063.92		
84.7 ft. AGL			84.6 ft. AGL			84.6 ft. AGL		
T-TIME	DIR	SPEED	T-TIME	DIR	SPEED	T-TIME	DIR	SPEED
SEC	DEG	KNOTS	SEC	DEG	KNOTS	SEC	DEG	KNOTS
T-30		CALM	T-30		CALM	T-30		CALM
T-20		CALM	T-20		CALM	T-20		CALM
T-10		CALM	T-10	194	01	T-10		CALM
T-0		CALM	T-0	194	01	T-0		CALM
T+10		CALM	T+10		CALM	T+10		CALM

TABLE 3. LC-33 MECHANICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET			LEVEL #2, 62 FEET		
X484,982.64, Y185,957.73, H0083.00 (base)			X484,982.64, Y185,957.73, H0083.00 (base)		
T-TIME	DIR	SPEED	T-TIME	DIR	SPEED
SEC	DEG	KNOTS	SEC	DEG	KNOTS
T-30	249	03	T-30	236	03
T-20	242	03	T-20	236	03
T-10	243	03	T-10	236	03
T-0	239	02	T-0	236	03
T+10	235	01	T+10	232	03

LEVEL #3, 102 FEET			LEVEL #4, 202 FEET		
X484,982.64, Y185,957.73, H0083.00 (base)			X484,982.64, Y185,957.73, H0083.00 (base)		
T-TIME	DIR	SPEED	T-TIME	DIR	SPEED
SEC	DEG	KNOTS	SEC	DEG	KNOTS
T-30	259	03	T-30	249	02
T-20	258	03	T-20	249	03
T-10	257	02	T-10	242	03
T-0	255	02	T-0	240	03
T+10	255	02	T+10	240	02

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-33

DATE 30 Oct 82

TIME 1701

COORDINATES (WSTM) X= 484,837.34 Y= 184,124.44 H= 3975.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	246	01
30	248	01
60	250	02
90	251	02
120	251	02
150	252	03
180	252	03
210	245	03
240	239	03
270	233	04
300	228	04
330	224	04
360	223	04
390	228	04
420	233	04
450	239	03
480	240	03
510	252	03
540	249	03
570	247	03
600	244	04
630	242	04
660	240	04
690	232	05
720	225	05
750	219	06
780	215	07
810	212	07
840	211	08
870	211	07

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
900	211	07
930	212	07
960	212	07
990	214	07
1020	217	06
1050	221	06
1080	225	05
1110	229	05
1140	234	05
1170	239	05
1200	244	06
1230	248	06
1260	252	06
1290	255	07
1320	259	08
1350	261	09
1380	263	10
1410	265	11
1440	266	12
1470	267	12
1500	268	13
1530	269	14
1560	269	15
1590	270	16
1620	270	16
1650	271	16
1680	271	17
1710	271	17
1740	271	17
1770	270	18

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
1800	269	19
1830	268	19
1860	267	20
1890	266	21
1920	265	21
1950	264	22
1980	263	
2010	262	23
2040	261	24
2070	261	24
2100	260	25
2130	259	25
2160	259	25
2190	258	26
2220	257	26
2250	257	26
2280	256	26
2310	255	26
2340	255	26
2370	254	25
2400	254	25
2430	253	25
2460	253	25
2490	253	25
2520	252	25
2550	252	24
2580	253	24
2610	253	24
2640	254	24
2670	254	25

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-33 DATE 30 Oct 82 TIME 1701

COORDINATES (WSTM) X= 484,837.34 Y= 184.124.44 H= 3975.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____

HEIGHTS ARE METERS AGL X OR FEET AGL _____.

[illegible][illegible][illegible]

COMPUTER MET MESSAGE DATA

30 Oct 82

USD 1650 MDT

METCM1324064

302300122876

00427004 29760876
 01302007 29630866
 02377011 28030841
 03409009 28820802
 04447007 23610756
 05460014 28210712
 06460025 27790670
 07447028 27600630
 08453025 27190592
 09437018 26780556
 10436017 26660522
 11442019 26240489
 12430021 25690443
 13460022 25030388
 14443020 24170337
 15439020 23490293
 16445012 22430252
 17447007 21910216
 18438017 20990185
 19491031 20530157
 20520030 20220133
 21498024 20230112
 22464017 20610095
 23444021 20810081
 24492011 20880069
 25472017 21060058
 26640004 21310050

JALLEI 1530 MDT

METCM1332065

302250140875

00267006 29420875
 01323008 29330865
 02378009 29110840
 03401012 28890801
 04425016 28540755
 05465016 28360711
 06459021 27960670
 07453023 27540630
 08454020 27340592
 09471013 27020556
 10457012 26650522
 11427015 26270489
 12447026 25870443
 13445021 25110388
 14421025 24320338
 15431024 23510293
 16442023 22650253
 17471021 21790217
 18473022 21050185
 19489023 20530157
 20510029 20310133
 21492025 20490113
 22483011 20750096
 23450018 20940081
 24471010 21080069
 25462015 21360059
 26038003 21550050

STALLION 1730 MDT

METCM1338067

310050151846

00284006 29170846
 01275012 29290836
 02289014 29150812
 03345018 28830775
 04385017 28390730
 05440017 27930687
 06473018 27470646
 07475024 27280607
 08473020 27050570
 09433020 26710535
 10445020 26270502
 11438023 25920470
 12435026 25470426
 13437030 24790372
 14429032 24060323
 15429033 23220280
 16434030 22360241
 17453024 21540207
 18467027 20770176
 19469029 20200140
 20481032 20270126
 21079017 20440107
 22456014 20900090
 23494016 20950077
 24470010 20850065
 25587010 21160056
 26470002 21320047

STATION ALTITUDE 3989.60 FEET MSL
30 OCT. 82
ASCENSION NO. 530

SIGNIFICANT LEVEL DATA
2030020530
WHITE SANDS
TABLE 6

GEODETLIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT, DEGREES CENTIGRADE	REL. HUM. PERCENT
876.2	23.9	21.0
865.9	22.8	20.0
850.0	21.7	20.0
722.0	8.0	34.0
700.0	7.2	41.0
618.6	0	49.0
597.9	-2.2	33.0
565.2	-2.9	41.0
500.0	-9.5	43.0
460.5	-12.7	24.0
400.0	-21.1	39.0
377.3	-24.7	48.0
369.1	-25.3	32.0
350.5	-28.1	23.0
305.3	-35.5	21.0
300.0	-36.2	20.0
270.0	-42.6	
266.9	-42.6	
250.0	-46.8	
200.0	-59.5	
175.4	-63.5	
150.0	-68.6	
143.5	-70.1	
140.7	-69.2	
130.9	-70.8	
128.6	-70.6	
125.6	-68.4	
121.8	-70.1	
116.3	-69.7	
100.0	-68.0	
92.1	-63.6	
79.2	-64.5	
70.0	-61.9	
64.8	-64.1	
58.6	-59.9	
54.0	-60.8	
50.0	-57.5	
46.4	-58.4	
43.0	-55.7	
40.6	-56.9	

STATION ALTITUDE 3490.00 FEET MSL
 30 OCT. 82 1850 MDT
 ASCENSION NO. 530

SIGNIFICANT LEVEL DATA
 3030020000
 WHITE PAPER DATA
 TABLE 6 (Cont'd)

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

PRESSURE GEOMETRIC MILLIBARS MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
37.2 74295.5	-52.6	
30.0 78887.4	-52.9	
22.7 84864.2	-51.0	
20.0 87614.1	-47.3	
17.4 90664.1	-47.3	
15.9 92657.8	-43.0	
13.7 95983.1	-43.0	
11.3 100324.9	-38.2	
10.0 103120.1	-36.8	
9.1 105277.5	-39.7	
8.2 107630.9	-39.7	
7.3 110309.1	-33.8	
7.0 111280.3	-33.2	

UPPLR AIR DATA
3030020530
WHITE SANDS
TABLE 7

STATION ALTITUDE 3489.00 FEET MSL
30 OCT. 82
ASCENSION NO. 53C

GEOMETRIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND METERS PER SECOND	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	876.2	23.9	21.0	1024.8	672.5	240.0	4.1	1.000255
4000.0	875.9	23.9	21.0	1024.5	672.5	239.0	4.1	1.000255
4500.0	860.7	22.4	20.0	1011.9	670.0	235.5	5.3	1.000249
5000.0	845.6	21.3	20.4	990.2	667.2	223.5	6.5	1.000245
5500.0	830.5	19.8	22.0	965.5	667.5	220.0	7.8	1.000242
6000.0	815.7	18.2	23.5	942.9	665.8	225.4	9.0	1.000239
6500.0	801.1	16.7	25.1	960.5	664.0	229.2	8.7	1.000236
7000.0	786.8	15.2	26.6	940.4	662.5	235.2	8.5	1.000232
7500.0	772.8	13.7	28.2	930.4	660.5	239.9	7.8	1.000229
8000.0	759.0	12.2	29.7	924.7	658.0	248.5	7.2	1.000226
8500.0	745.4	10.7	31.3	915.1	657.0	254.5	7.9	1.000222
9000.0	732.1	9.2	32.8	901.6	655.7	257.5	9.2	1.000219
9500.0	719.0	7.9	34.9	889.5	653.7	260.4	11.9	1.000216
10000.0	705.8	7.4	39.1	874.5	653.5	262.5	15.0	1.000214
10500.0	692.8	6.6	41.7	860.2	652.3	263.0	19.7	1.000211
11000.0	680.0	5.5	42.9	846.2	651.0	263.5	23.0	1.000208
11500.0	667.3	4.4	44.1	835.8	649.7	261.5	25.9	1.000204
12000.0	655.0	3.3	45.3	825.6	648.4	258.8	27.8	1.000201
12500.0	642.8	2.2	46.5	811.0	647.1	255.7	28.3	1.000197
13000.0	630.9	1.1	47.7	799.7	645.8	252.2	28.2	1.000194
13500.0	619.2	.1	48.9	786.1	644.5	250.9	28.1	1.000191
14000.0	607.5	-.2	49.5	774.1	644.2	250.9	27.9	1.000185
14500.0	596.1	-.4	33.4	760.5	643.7	253.5	25.9	1.000179
15000.0	584.8	-1.3	36.1	748.5	642.7	256.1	23.6	1.000177
15500.0	573.7	-2.2	38.9	736.7	641.7	255.5	19.6	1.000175
16000.0	562.9	-3.1	41.1	725.2	640.0	249.9	16.5	1.000172
16500.0	552.0	-4.2	41.4	714.0	639.3	247.1	16.7	1.000169
17000.0	541.4	-5.2	41.7	703.1	638.1	246.0	17.1	1.000166
17500.0	531.0	-6.3	42.0	692.5	636.0	247.4	17.8	1.000163
18000.0	520.8	-7.3	42.3	681.7	635.5	246.9	18.1	1.000160
18500.0	510.8	-8.4	42.7	671.5	634.5	244.4	18.0	1.000157
19000.0	500.9	-9.4	43.0	661.0	633.0	243.0	18.3	1.000154
19500.0	491.1	-10.2	38.9	650.1	632.0	243.0	18.9	1.000151
20000.0	481.5	-11.0	34.3	639.3	631.0	243.0	19.5	1.000147
20500.0	472.1	-11.7	29.7	628.7	630.1	245.5	19.9	1.000144
21000.0	462.8	-12.5	25.2	618.5	629.1	247.1	20.3	1.000141
21500.0	453.6	-13.6	25.6	608.5	627.0	248.1	20.6	1.000139
22000.0	444.5	-14.8	27.8	599.1	626.5	248.9	20.9	1.000137
22500.0	435.6	-16.0	29.9	589.9	624.8	248.6	20.9	1.000134
23000.0	426.9	-17.2	32.1	580.6	623.4	248.5	21.0	1.000132

STATION ALTITUDE 3989.00 FEET MSL
30 OCT. 82 1650 MDT
ASCENSION NO. 530

UPPER AIR DATA
R030020530
WHITE SAHNS
TABLE 7 Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
23500.0	418.3	-18.4	34.2	571.9	621.9	252.5	1.000130
24000.0	409.9	-19.6	36.4	563.1	620.4	257.3	1.000128
24500.0	401.7	-20.8	38.5	554.4	618.9	259.7	1.000126
25000.0	393.5	-22.1	41.5	545.9	617.4	261.6	1.000124
25500.0	385.5	-23.4	44.7	537.4	615.8	260.7	1.000122
26000.0	377.5	-24.7	47.9	529.1	614.2	259.5	1.000120
26500.0	369.7	-25.3	33.3	519.5	613.5	258.2	1.000117
27000.0	362.0	-26.3	28.6	510.9	612.1	255.3	1.000115
27500.0	354.5	-27.5	25.0	502.6	610.7	250.3	1.000113
28000.0	347.1	-28.6	22.9	494.4	609.2	247.5	1.000111
28500.0	339.7	-29.8	22.5	486.2	607.8	246.6	1.000109
29000.0	332.5	-30.9	22.2	478.1	606.3	246.5	1.000107
29500.0	325.4	-32.1	21.9	470.2	604.9	247.4	1.000105
30000.0	318.5	-33.2	21.6	462.4	603.5	247.9	1.000104
30500.0	311.7	-34.4	21.3	454.8	602.0	247.0	1.000102
31000.0	305.1	-35.5	21.0	447.2	600.6	246.2	1.000100
31500.0	298.5	-36.5	19.0**	439.4	599.3	245.4	1.000098
32000.0	291.9	-37.9	14.8**	432.2	597.6	244.8	1.000096
32500.0	285.5	-39.2	10.6**	425.1	595.9	246.5	1.000095
33000.0	279.3	-40.6	6.4**	418.2	594.2	248.0	1.000093
33500.0	273.1	-41.9	2.2**	411.4	592.4	250.3	1.000092
34000.0	267.1	-42.6		403.6	591.5	252.6	1.000090
34500.0	261.1	-44.0		397.0	589.7	253.3	1.000088
35000.0	255.2	-45.5		390.5	587.8	253.7	1.000087
35500.0	249.5	-46.9		384.2	586.0	250.7	1.000086
36000.0	243.7	-48.3		377.3	584.2	248.2	1.000084
36500.0	238.0	-49.6		370.9	582.5	248.3	1.000083
37000.0	232.5	-50.9		364.5	580.7	247.9	1.000081
37500.0	227.1	-52.3		358.1	579.0	246.2	1.000080
38000.0	221.8	-53.6		351.9	577.2	245.1	1.000078
38500.0	216.6	-55.0		345.9	575.5	245.6	1.000077
39000.0	211.6	-56.3		339.9	573.7	248.1	1.000076
39500.0	206.7	-57.6		334.0	571.9	256.6	1.000074
40000.0	201.8	-59.0		328.3	570.1	263.6	1.000073
40500.0	197.0	-60.0		322.0	568.8	266.0	1.000072
41000.0	192.3	-60.7		315.3	567.8	267.5	1.000070
41500.0	187.6	-61.4		308.7	566.8	269.7	1.000069
42000.0	183.1	-62.2		302.3	565.8	271.8	1.000067
42500.0	178.7	-62.9		296.1	564.8	276.1	1.000066
43000.0	174.3	-63.7		289.9	563.8	280.7	1.000065

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
30 OCT. 82
ASCENSION NO. 530

UPPER AIR DATA
3030020036
WHITE SANDS
TABLE 7 Cont'd

GEODETIC COORDINATES
32.00043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
43500.0	170.0	-64.5		283.9	562.7	282.6	1.000063
44000.0	165.8	-65.3		276.0	561.6	281.7	1.000062
44500.0	161.7	-66.1		272.2	560.5	281.3	1.000061
45000.0	157.7	-67.0		268.5	559.4	282.0	1.000059
45500.0	153.8	-67.8		268.9	558.5	282.5	1.000058
46000.0	150.0	-68.6		253.5	557.2	283.4	1.000057
46500.0	146.3	-69.5		250.2	556.0	284.5	1.000056
47000.0	142.6	-69.8		244.3	555.5	288.2	1.000054
47500.0	139.0	-69.5		237.6	556.0	288.6	1.000053
48000.0	135.5	-70.0		232.4	555.2	290.6	1.000052
48500.0	132.1	-70.6		227.2	554.5	289.3	1.000051
49000.0	128.8	-70.6		221.5	554.4	287.6	1.000049
49500.0	125.5	-68.4		213.6	557.4	280.6	1.000048
50000.0	122.4	-69.8		209.7	555.5	273.2	1.000047
50500.0	119.3	-69.9		204.5	555.4	274.1	1.000046
51000.0	116.3	-69.7		199.2	555.7	277.0	1.000044
51500.0	113.4	-69.4		193.9	556.1	280.3	1.000043
52000.0	110.6	-69.1		188.6	556.5	284.4	1.000042
52500.0	107.8	-68.8		183.6	556.8	286.3	1.000041
53000.0	105.1	-68.6		179.0	557.2	285.1	1.000040
53500.0	102.5	-68.3		174.5	557.6	282.7	1.000039
54000.0	99.9	-68.0		169.7	556.1	278.4	1.000038
54500.0	97.5	-66.6		164.4	559.9	272.2	1.000037
55000.0	95.1	-65.3		159.3	561.7	257.4	1.000035
55500.0	92.7	-64.0		154.4	563.5	243.8	1.000034
56000.0	90.5	-63.7		150.4	563.8	241.8	1.000033
56500.0	88.2	-63.9		146.9	563.6	240.2	1.000033
57000.0	86.1	-64.0		143.4	563.4	243.5	1.000032
57500.0	84.0	-64.2		140.0	563.2	248.0	1.000031
58000.0	81.9	-64.3		136.7	563.0	250.4	1.000030
58500.0	79.9	-64.4		133.4	562.8	251.9	1.000030
59000.0	78.0	-64.2		130.0	563.2	250.7	1.000029
59500.0	76.1	-63.7		126.5	563.9	265.6	1.000028
60000.0	74.2	-63.1		123.1	564.0	273.3	1.000027
60500.0	72.4	-62.6		119.6	565.3	274.2	1.000027
61000.0	70.7	-62.1		116.6	566.0	275.6	1.000026
61500.0	68.9	-62.3		113.9	565.7	271.4	1.000025
62000.0	67.3	-63.0		111.5	564.7	266.2	1.000025
62500.0	65.6	-63.7		109.2	563.8	263.4	1.000024
63000.0	64.0	-63.6		106.5	563.9	263.4	1.000024

STATION ALTITUDE 3989.0 FEET MSL
30 OCT. 82
ASCENSION NO. 530

UPPER AIR DATA
3030020530
WIND DATA
TABLE 7 Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METRIC	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
63500.0	62.5	-62.6		10.4	565.0	203.1	15.8	1.000023
64000.0	61.0	-61.6		10.4	560.7	201.7	16.0	1.000022
64500.0	59.5	-60.5		97.5	563.0	200.3	16.1	1.000022
65000.0	58.1	-60.0		94.9	560.4	202.7	16.3	1.000021
65500.0	56.7	-60.3		92.8	560.4	205.5	16.5	1.000021
66000.0	55.3	-60.5		90.6	562.1	273.1	14.7	1.000020
66500.0	54.0	-60.8		88.6	567.7	289.1	11.9	1.000020
67000.0	52.7	-59.8		86.0	567.1	310.0	9.5	1.000019
67500.0	51.5	-58.7		83.6	570.5	339.9	6.5	1.000019
68000.0	50.2	-57.7		81.2	571.0	19.2	5.6	1.000018
68500.0	49.0	-57.7		79.3	571.6	50.9	1.8	1.000018
69000.0	47.9	-58.0		77.5	571.4	160.9	2.9	1.000017
69500.0	46.7	-58.3		75.8	571.0	189.5	3.5	1.000017
70000.0	45.6	-57.8		73.6	571.7	175.6	4.0	1.000016
70500.0	44.5	-57.0		71.8	572.8	182.0	2.5	1.000016
71000.0	43.5	-56.1		69.8	573.9	121.0	1.4	1.000016
71500.0	42.5	-56.0		68.1	574.1	108.2	1.5	1.000015
72000.0	41.5	-56.5		66.7	573.5	105.5	1.6	1.000015
72500.0	40.5	-56.8		65.2	573.1	118.7	1.3	1.000015
73000.0	39.6	-56.6		63.3	574.6	140.0	1.1	1.000014
73500.0	38.6	-54.4		61.5	576.1	190.0	.9	1.000014
74000.0	37.7	-53.3		59.8	577.7	204.2	1.3	1.000013
74500.0	36.8	-52.6		58.2	575.5	284.2	2.5	1.000013
75000.0	36.0	-52.6		56.9	573.5	312.9	3.3	1.000013
75500.0	35.2	-52.7		55.6	578.5	328.5	4.5	1.000012
76000.0	34.3	-52.7		54.3	576.4	341.3	4.2	1.000012
76500.0	33.6	-52.7		53.0	576.4	2.0	3.4	1.000012
77000.0	32.8	-52.8		51.8	576.3	19.0	2.7	1.000012
77500.0	32.0	-52.8		50.6	578.3	3.7	.8	1.000011
78000.0	31.3	-52.8		49.5	578.2	219.6	1.2	1.000011
78500.0	30.5	-52.9		48.3	578.2	251.6	4.2	1.000011
79000.0	29.8	-52.9		47.2	578.2	258.1	7.6	1.000011
79500.0	29.2	-52.7		46.1	576.4	261.0	9.5	1.000010
80000.0	28.5	-52.5		45.0	576.0	263.6	10.2	1.000010
80500.0	27.8	-52.4		43.9	578.8	265.8	10.9	1.000010
81000.0	27.2	-52.2		42.9	579.0	264.4	11.0	1.000010
81500.0	26.6	-52.1		41.8	579.3	263.0	11.1	1.000009
82000.0	25.9	-51.9		40.9	579.5	262.3	11.6	1.000009
82500.0	25.3	-51.8		39.9	577.7	262.5	12.7	1.000009
83000.0	24.8	-51.6		38.9	577.9	262.7	13.8	1.000009

STATION ALTITUDE 3989.00 F. T. MSL
30 OCT. 82
ASCENSION 110. 530

UPPER AIR DATA
3030020030
WHITE SANDS
TABLE 7 Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION, DEGREES (IN)	SPEED KNOTS	INDEX OF REFRACTION
83500.0	24.2	-51.4		35.0	580.1	264.8	13.8	1.000008
84000.0	23.6	-51.3		37.1	580.3	267.5	13.5	1.000008
84500.0	23.1	-51.1		38.2	580.5	269.8	13.3	1.000008
85000.0	22.6	-50.8		35.3	580.9	270.7	13.4	1.000008
85500.0	22.0	-50.1		34.4	581.8	271.6	13.5	1.000008
86000.0	21.5	-49.5		33.6	582.0	274.6	13.3	1.000007
86500.0	21.1	-48.8		32.7	583.5	279.7	12.9	1.000007
87000.0	20.6	-48.1		31.9	584.4	284.9	12.6	1.000007
87500.0	20.1	-47.5		31.0	585.3	291.2	11.8	1.000007
88000.0	19.7	-47.3		30.3	585.5	298.2	11.1	1.000007
88500.0	19.2	-47.3		29.6	585.5	302.4	10.5	1.000007
89000.0	18.8	-47.3		29.0	585.5	300.5	9.7	1.000006
89500.0	18.3	-47.3		28.3	585.5	296.2	9.0	1.000006
90000.0	17.9	-47.3		27.7	585.5	294.2	9.1	1.000006
90500.0	17.5	-47.3		27.0	585.5	290.1	9.5	1.000006
91000.0	17.1	-46.6		26.3	586.6	286.7	10.3	1.000006
91500.0	16.8	-45.5		25.6	587.6	285.5	13.0	1.000006
92000.0	16.4	-44.4		24.9	589.2	284.7	15.7	1.000006
92500.0	16.0	-43.3		24.3	590.6	290.7	17.9	1.000005
93000.0	15.7	-43.0		23.7	591.0	298.7	20.1	1.000005
93500.0	15.3	-43.0		23.2	591.0	304.0	22.2	1.000005
94000.0	15.0	-43.0		22.7	591.0	300.9	21.2	1.000005
94500.0	14.6	-43.0		22.2	591.0	297.6	20.2	1.000005
95000.0	14.3	-43.0		21.7	591.0	286.5	20.5	1.000005
95500.0	14.0	-43.0		21.2	591.0	272.1	22.8	1.000005
96000.0	13.7	-43.0		20.7	591.0	261.1	26.3	1.000005
96500.0	13.4	-42.4		20.2	591.8	256.2	30.0	1.000005
97000.0	13.1	-41.9		19.7	592.5	252.4	33.8	1.000004
97500.0	12.8	-41.3		19.2	593.2	251.0	38.1	1.000004
98000.0	12.5	-40.8		18.6	593.9	251.5	42.6	1.000004
98500.0	12.3	-40.2		18.3	594.6	251.9	47.1	1.000004
99000.0	12.0	-39.7		17.9	595.3	256.2	50.0	1.000004
99500.0	11.7	-39.1		17.5	596.0	260.4	53.0	1.000004
100000.0	11.5	-38.6		17.0	596.7	264.2	55.5	1.000004
100500.0	11.2	-38.1		16.6	597.3	267.6	56.5	1.000004
101000.0	11.0	-37.9		16.2	597.8	270.9	57.8	1.000004
101500.0	10.7	-37.6		15.9	597.9	273.4	58.6	1.000004
102000.0	10.5	-37.4		15.5	598.2	275.5	59.2	1.000003
102500.0	10.3	-37.1		15.2	598.5	277.3	59.7	1.000003
103000.0	10.1	-36.9		14.8	598.8	277.5	58.3	1.000003

STATION ALTITUDE 3989.00 FEET MSL
30 OCT. 82
ASCENSION NO. 530

UPPER AIR DATA
3000020000
WHITE SANDS
TABLE 7 Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
100.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
103500.0	9.8	-37.3			14.5	598.3	277.7	56.9	1.000003
104000.0	9.6	-38.0			14.5	597.4	277.5	55.9	1.000003
104500.0	9.4	-38.7			14.0	596.0	276.9	55.3	1.000003
105000.0	9.2	-39.3			13.7	595.7	276.3	54.7	1.000003
105500.0	9.0	-39.7			13.4	595.2	275.9	55.3	1.000003
106000.0	8.8	-39.7			13.2	595.2	275.4	56.1	1.000003
106500.0	8.6	-39.7			12.9	595.2	274.6	57.9	1.000003
107000.0	8.4	-39.7			12.6	595.2	273.1	61.8	1.000003
107500.0	8.3	-39.7			12.3	595.2	271.9	65.7	1.000003
108000.0	8.1	-38.9			12.0	596.3	272.3	69.4	1.000003
108500.0	7.9	-37.8			11.7	597.7	273.1	73.2	1.000003
109000.0	7.7	-36.7			11.4	595.1			1.000003
109500.0	7.6	-35.6			11.1	600.5			1.000002
110000.0	7.4	-34.5			10.8	601.9			1.000002
110500.0	7.2	-33.7			10.5	601.9			1.000002
111000.0	7.1	-33.4			10.3	603.2			1.000002

STATION ALTITUDE 3980.00 FEET MSL
30 OCT. 82
ASCENSION 110. 530

MANDATORY LEVELS
30300, 20530
WHITE SANDS
TABLE 2

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4851.	21.7	-2.2	20.	230.5	0.2
800.0	6558.	16.6	-3.4	25.	229.7	8.7
750.0	8342.	11.2	-5.4	31.	253.1	7.5
700.0	10215.	7.2	-5.1	41.	262.8	17.5
650.0	12200.	2.9	-7.0	40.	257.8	20.4
600.0	14311.	-3.3	-14.0	35.	252.2	20.7
550.0	16580.	-6.4	-15.5	41.	246.5	10.8
500.0	19021.	-9.5	-12.7	43.	243.0	18.4
450.0	21671.	-14.1	-29.2	26.	248.4	20.7
400.0	24565.	-21.1	-31.3	39.	260.2	21.4
350.0	27753.	-28.2	-42.8	25.	247.0	22.0
307.6	31322.	-36.2	-50.9	20.	245.0	18.6
250.0	35380.	-46.8			251.1	9.3
200.0	40098.	-59.5			264.0	10.5
175.0	42813.	-63.6			279.8	19.7
150.0	45881.	-68.6			263.4	37.7
125.0	49444.	-68.7			279.7	25.6
100.0	53819.	-68.0			278.8	10.5
80.0	58290.	-64.4			251.0	15.8
70.0	60983.	-61.9			274.0	10.5
60.0	64009.	-60.9			260.8	10.0
50.0	67837.	-57.5			20.4	5.1
40.0	72469.	-56.2			129.7	1.2
30.0	78551.	-52.9			250.8	0.6
25.0	82421.	-51.7			262.0	15.3
20.0	87204.	-47.3			292.1	11.7
15.0	93490.	-43.0			301.5	21.4
10.0	102567.	-36.8			277.0	58.1
7.0	110640.	-33.2				

STATION ALTITUDE 4051.00 FEET MSL
30 OCT. 62
ASCENSION NO. 105

SIGHTING LEVEL DATA
3030030165
JALLEN
TABLE 9

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES CENTIGRADE	DEW-POINT DEGREES CENTIGRADE	
875.1	4051.0	20.4	3.6	33.0
850.0	4871.9	18.1	-1.2	27.0
814.5	6063.6	15.0	-2.4	30.0
806.7	6331.4	16.0	-2.0	29.0
740.1	8709.8	18.2	-0.2	31.0
715.3	9640.5	9.8	-3.1	40.0
700.0	10230.9	9.9	-2.4	42.0
661.2	11773.2	4.5	-7.0	43.0
623.2	13348.2	1.0	-9.0	47.0
606.1	14083.5	.9	-13.2	34.0
597.6	14456.4	.4	-11.9	39.0
539.7	17118.4	-4.7	-23.6	21.0
500.0	19077.4	-9.5	-24.2	29.0
484.2	19890.8	-11.2	-21.5	42.0
476.6	20289.7	-11.0	-26.5	29.0
449.0	21783.8	-14.7	-29.5	27.0
424.8	23158.6	-16.7	-31.2	27.0
400.0	24635.6	-20.2	-30.0	41.0
392.0	25126.9	-21.7	-28.7	53.0
370.1	26512.1	-24.8	-35.5	36.0
337.7	28682.9	-30.0	-41.5	32.0
300.0	31419.1	-36.0	-46.9	34.0
287.9	32352.8	-39.1	-49.2	33.0
250.0	35482.9	-47.4		
200.0	40210.1	-50.8		
176.1	42801.4	-64.6		
150.0	45995.1	-69.5		
131.8	48532.9	-70.7		
127.6	49168.1	-60.5		
119.6	50439.1	-70.4		
111.6	51805.9	-67.2		
100.0	53992.2	-66.8		
90.5	55990.0	-64.1		
87.1	56766.6	-65.8		
73.4	60237.8	-60.9		
70.0	61207.8	-62.4		
67.2	62036.9	-63.9		
53.9	66579.0	-56.6		
50.9	68148.4	-57.8		
46.2	69791.9	-58.8		

STATION ALTITUDE 4051.00 FEET MSL
30 OCT. 82
ASCLUSION NO. 105

SIGNIFICANT LEVY DATA
30/00/20109
JALLEN
TABLE 2 CONT'D

GEOLOGIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE OF TITIC	TEMPERATURE	REL. HUM.
ALTITUDE	DEG F (WPOINT)	PERCENT
MILLIBARS MSL FEET	DEG F (CENTIGRADE)	
43.4 71093.2	-55.6	
30.0 78950.4	-51.2	
24.3 83073.7	-52.0	
20.0 87607.0	-47.3	
17.7 90360.0	-46.7	
15.8 92082.5	-47.0	
14.0 95577.2	-44.4	
12.0 97397.0	-43.5	
11.4 100190.0	-36.4	
10.0 103212.0	-35.7	
7.0 111397.7	-30.1	
0.8 112059.8	-20.1	

STATION ALTITUDE 4051.00 FEET MSL
30 OCT. 52
ASCENSION NO. 165

UPPER AIR DATA
3630030165
JALLEN
TABLE 10

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.0	875.1	20.4	33.0	1035.0	698.0	150.0	6.0	1.000265
4500.0	861.3	19.1	29.7	1023.5	697.0	167.3	5.8	1.000257
5000.0	846.1	17.8	27.3	1010.7	695.3	186.2	6.1	1.000250
5500.0	831.1	16.5	28.6	997.3	693.8	201.7	7.0	1.000246
6000.0	816.4	15.2	29.8	984.0	692.3	212.9	8.3	1.000243
6500.0	801.8	13.9	29.1	969.0	690.8	221.6	10.0	1.000238
7000.0	787.4	14.4	29.6	951.8	691.4	228.8	12.3	1.000234
7500.0	773.3	13.2	30.0	938.8	689.9	234.1	14.2	1.000230
8000.0	759.4	11.9	30.4	926.0	688.5	239.8	14.3	1.000226
8500.0	745.7	10.7	30.8	913.4	687.0	246.2	14.5	1.000222
9000.0	732.3	10.1	33.8	898.8	685.5	253.5	14.9	1.000220
9500.0	719.0	9.9	38.6	882.0	684.2	258.5	15.7	1.000219
10000.0	705.9	9.0	41.2	865.0	683.3	260.4	16.7	1.000217
10500.0	693.1	9.0	42.2	853.0	682.2	261.1	17.9	1.000213
11000.0	680.4	7.2	42.5	843.4	681.1	259.8	19.3	1.000209
11500.0	667.9	5.5	42.8	833.3	680.1	258.7	20.7	1.000204
12000.0	655.6	4.0	43.6	822.4	679.2	257.7	21.9	1.000201
12500.0	643.4	2.9	44.8	810.4	677.9	256.7	23.0	1.000197
13000.0	631.4	1.8	46.1	798.5	676.6	254.5	22.8	1.000194
13500.0	619.6	1.0	44.3	786.0	675.0	252.2	22.6	1.000190
14000.0	608.0	.9	35.5	771.0	673.4	252.4	21.3	1.000184
14500.0	596.6	.3	38.7	753.8	674.7	252.0	20.1	1.000181
15000.0	585.3	-6	35.3	747.2	673.5	257.0	17.9	1.000177
15500.0	574.2	-1.6	31.9	735.8	672.3	262.0	15.9	1.000173
16000.0	563.3	-2.6	28.6	724.5	671.2	263.0	14.2	1.000169
16500.0	552.6	-3.5	25.2	713.4	670.0	264.9	12.6	1.000165
17000.0	542.2	-4.5	21.8	702.5	668.8	263.6	12.1	1.000161
17500.0	531.7	-5.6	22.6	692.0	667.4	261.8	11.6	1.000159
18000.0	521.5	-6.9	24.0	681.7	665.9	256.1	11.7	1.000157
18500.0	511.4	-8.1	26.6	671.7	664.5	250.5	11.9	1.000154
19000.0	501.5	-9.3	28.7	661.7	663.0	245.0	13.6	1.000152
19500.0	491.7	-10.4	35.8	651.4	661.7	240.9	15.6	1.000151
20000.0	482.1	-11.4	38.4	641.1	660.5	242.6	19.1	1.000148
20500.0	472.6	-12.3	28.7	630.8	659.4	244.4	22.7	1.000144
21000.0	463.3	-13.2	28.0	620.0	658.2	245.7	24.3	1.000142
21500.0	454.1	-14.2	27.4	610.0	657.1	247.0	25.5	1.000139
22000.0	445.1	-15.0	27.0	600.4	656.1	249.0	26.1	1.000137
22500.0	436.2	-15.7	27.0	590.1	655.2	251.8	26.9	1.000134
23000.0	427.5	-16.5	27.0	580.0	654.3	255.5	28.1	1.000132
23500.0	418.9	-17.5	30.2	570.0	653.0	258.0	26.7	1.000130

STATION ALTITUDE 4051.00 FEET MSL
30 OCT. 82
ASCENSION NO. 165

UPPER AIR DATA
3030030163
JALLER

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 10 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
24000.0	410.5	-18.7	35.0	561.7	621.0	201.8	1.000128
24500.0	402.2	-19.9	39.7	553.0	620.1	209.7	1.000126
25000.0	394.1	-21.3	49.9	544.8	619.4	205.8	1.000125
25500.0	386.0	-22.5	48.4	536.5	618.9	249.2	1.000122
26000.0	378.1	-23.7	42.3	527.7	618.5	244.3	1.000120
26500.0	370.3	-24.8	36.1	519.2	614.1	241.3	1.000117
27000.0	362.6	-26.0	35.1	510.8	612.0	239.4	1.000115
27500.0	355.0	-27.2	34.2	502.6	611.1	230.8	1.000113
28000.0	347.6	-28.4	33.3	494.5	609.6	237.7	1.000111
28500.0	340.3	-29.6	32.3	486.6	608.1	236.6	1.000109
29000.0	333.1	-30.8	32.2	478.7	606.9	235.3	1.000108
29500.0	326.0	-32.1	32.6	470.9	604.9	233.9	1.000106
30000.0	319.0	-33.3	33.0	463.3	603.4	235.4	1.000104
30500.0	312.2	-34.5	33.3	455.6	601.8	237.6	1.000102
31000.0	305.5	-35.8	33.0	448.4	600.2	241.5	1.000101
31500.0	298.9	-37.1	33.4	441.1	597.8	243.7	1.000099
32000.0	292.4	-38.3	33.4	433.7	597.1	244.1	1.000097
32500.0	286.0	-39.5	31.4**	426.4	595.5	243.2	1.000095
33000.0	279.6	-40.8	26.2**	419.2	593.9	241.7	1.000094
33500.0	273.4	-42.1	20.9**	412.0	592.1	240.7	1.000092
34000.0	267.3	-43.5	15.6**	405.4	590.4	240.3	1.000090
34500.0	261.3	-44.8	10.4**	398.7	588.7	245.9	1.000089
35000.0	255.5	-46.1	5.1**	392.1	587.0	246.8	1.000087
35500.0	249.8	-47.4		385.6	585.3	249.2	1.000086
36000.0	244.0	-48.8		378.8	583.6	252.3	1.000084
36500.0	238.3	-50.1		372.1	581.9	250.1	1.000083
37000.0	232.7	-51.4		365.6	580.2	259.7	1.000081
37500.0	227.3	-52.7		359.2	578.4	262.8	1.000080
38000.0	222.0	-54.0		352.9	576.7	264.8	1.000079
38500.0	216.8	-55.3		346.7	575.0	265.6	1.000077
39000.0	211.8	-56.6		340.7	573.3	268.2	1.000076
39500.0	206.8	-57.9		334.8	571.5	266.7	1.000075
40000.0	202.0	-59.2		329.0	569.8	267.2	1.000073
40500.0	197.2	-60.5		323.6	568.3	267.7	1.000072
41000.0	192.4	-61.8		318.3	566.1	268.1	1.000070
41500.0	187.7	-62.2		313.0	563.8	268.2	1.000069
42000.0	183.2	-63.1		308.0	561.6	268.6	1.000068
42500.0	178.7	-64.0		297.7	560.4	269.9	1.000066
43000.0	174.4	-64.9		291.6	562.2	271.5	1.000065
43500.0	170.0	-65.6		285.4	564.2	273.5	1.000064

** AT LAST ONE, ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
30 OCT. 82 1530 MDT
ASCENSION NO. 165

UPPER AIR DATA
NO OBSERVES
CALLED

GEOMETRIC COORDINATES
33.10712 LAT DEG
106.49511 LONG DEG

TABLE 10 (CONT'D)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/S	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
44000.0	165.8	-66.4		273.3	360.2	273.7	1.000062
44500.0	161.7	-67.1		273.4	359.2	271.3	1.000061
45000.0	157.7	-67.8		267.6	358.2	269.2	1.000060
45500.0	153.8	-68.6		261.9	357.2	267.8	1.000058
46000.0	150.0	-69.3		256.3	356.2	273.2	1.000057
46500.0	146.2	-69.6		250.2	355.8	261.4	1.000056
47000.0	142.5	-69.9		244.2	355.5	266.3	1.000054
47500.0	138.9	-70.1		238.4	355.1	290.2	1.000053
48000.0	135.4	-70.4		232.7	354.7	269.7	1.000052
48500.0	132.0	-70.7		227.2	354.3	265.2	1.000051
49000.0	128.7	-69.8		220.5	353.5	260.3	1.000049
49500.0	125.5	-69.7		214.9	353.6	275.6	1.000048
50000.0	122.3	-70.1		209.0	355.1	274.1	1.000047
50500.0	119.2	-70.3		204.7	354.9	270.2	1.000046
51000.0	116.2	-69.1		198.5	356.5	277.7	1.000044
51500.0	113.3	-67.9		192.4	358.1	278.5	1.000043
52000.0	110.5	-67.2		186.2	359.1	278.9	1.000042
52500.0	107.8	-67.1		182.2	359.3	278.7	1.000041
53000.0	105.1	-67.0		177.6	359.4	278.6	1.000040
53500.0	102.5	-66.9		173.1	359.5	278.7	1.000039
54000.0	100.0	-66.8		168.7	359.6	277.8	1.000038
54500.0	97.5	-66.1		164.1	360.6	274.4	1.000037
55000.0	95.1	-65.4		159.5	361.5	269.0	1.000036
55500.0	92.8	-64.8		155.1	362.4	262.1	1.000035
56000.0	90.5	-64.1		150.6	363.3	255.1	1.000034
56500.0	88.3	-65.2		147.9	361.8	250.9	1.000033
57000.0	86.1	-65.5		144.4	361.4	249.1	1.000032
57500.0	84.0	-64.8		140.4	362.4	249.2	1.000031
58000.0	82.0	-64.1		136.6	363.3	250.3	1.000030
58500.0	80.0	-63.4		132.8	364.3	254.0	1.000030
59000.0	78.0	-62.6		129.1	365.2	257.7	1.000029
59500.0	76.1	-61.9		125.5	366.2	261.5	1.000028
60000.0	74.3	-61.2		122.1	367.1	263.2	1.000027
60500.0	72.5	-61.3		119.2	367.0	265.3	1.000027
61000.0	70.7	-62.1		116.7	368.0	263.3	1.000026
61500.0	69.0	-62.9		114.3	368.9	262.3	1.000025
62000.0	67.3	-63.8		112.0	369.6	258.6	1.000025
62500.0	65.7	-63.2		109.0	368.5	254.9	1.000024
63000.0	64.1	-62.4		106.0	365.6	251.1	1.000024
63500.0	62.6	-61.5		103.0	366.7	250.3	1.000023

STATION ALTITUDE 4051.60 FEET MSL
30 OCT. 82
ASCENSION NO. 105

UNDER AIR DATA
3030030105
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 10 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (TW) SPEED M/SEC	INDEX OF REFRACTION
64000.0	61.1	-60.7		100.2	307.6	252.5	1.000022
64500.0	59.6	-59.9		97.4	306.9	256.0	1.000022
65000.0	58.2	-59.1		94.7	309.9	262.9	1.000021
65500.0	56.8	-58.3		92.1	311.0	270.0	1.000021
66000.0	55.4	-57.5		89.6	312.1	281.2	1.000020
66500.0	54.1	-56.7		87.1	313.1	317.0	1.000019
67000.0	52.8	-56.9		85.1	312.9	350.0	1.000019
67500.0	51.6	-57.3		83.2	312.4	27.8	1.000019
68000.0	50.4	-57.7		81.4	311.9	27.2	1.000018
68500.0	49.2	-58.0		79.6	311.4	349.1	1.000018
69000.0	48.0	-58.3		77.6	311.0	267.1	1.000017
69500.0	46.9	-58.6		75.1	310.6	276.9	1.000017
70000.0	45.7	-58.3		74.2	311.0	275.9	1.000017
70500.0	44.7	-57.1		72.6	312.7	273.0	1.000016
71000.0	43.6	-55.8		69.9	314.3	209.6	1.000016
71500.0	42.6	-55.4		68.1	314.9	247.6	1.000015
72000.0	41.6	-55.1		66.5	315.5	216.7	1.000015
72500.0	40.6	-54.8		64.8	316.0	208.9	1.000014
73000.0	39.7	-54.5		63.2	316.0	213.9	1.000014
73500.0	38.8	-54.3		61.7	316.4	219.6	1.000014
74000.0	37.9	-54.0		60.2	316.8	227.4	1.000013
74500.0	37.0	-53.7		58.7	317.1	235.4	1.000013
75000.0	36.1	-53.4		57.3	317.5	243.2	1.000013
75500.0	35.3	-53.1		55.9	317.9	250.7	1.000012
76000.0	34.5	-52.9		54.5	318.2	258.1	1.000012
76500.0	33.7	-52.6		53.2	318.6	265.4	1.000012
77000.0	32.9	-52.3		51.9	319.0	272.7	1.000012
77500.0	32.1	-52.0		50.6	319.3	286.7	1.000011
78000.0	31.4	-51.7		49.4	319.7	300.9	1.000011
78500.0	30.7	-51.5		48.2	320.1	310.1	1.000011
79000.0	29.9	-51.2		47.0	320.4	315.6	1.000010
79500.0	29.2	-51.4		45.9	320.2	317.7	1.000010
80000.0	28.6	-51.5		44.9	320.0	313.7	1.000010
80500.0	27.9	-51.7		43.9	319.6	293.6	1.000010
81000.0	27.3	-51.8		42.9	319.6	274.0	1.000010
81500.0	26.6	-52.0		42.0	319.4	270.0	1.000009
82000.0	26.0	-52.1		41.0	319.2	267.4	1.000009
82500.0	25.4	-52.3		40.1	319.0	264.4	1.000009
83000.0	24.8	-52.5		39.2	318.8	261.1	1.000009
83500.0	24.3	-52.6		38.3	318.6	258.6	1.000009

STATION ALTITUDE 4051.00 FEET MSL
30 OCT. 82 1530 MDT
ASCENSION NO. 165

UPPER AIR DATA
3030030165
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 10 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KILOTS	WIND DATA DIRECTION (DEGREES (TN))	SPEED KILOTS	INDEX OF REFRACTION
84000.0	23.7	-51.9		37.3	579.4	252.0	11.3	1.000008
84500.0	23.2	-51.3		36.4	580.3	247.1	12.3	1.000008
85000.0	22.6	-50.7		35.5	581.1	244.4	13.3	1.000008
85500.0	22.1	-50.1		34.6	581.9	247.0	14.4	1.000008
86000.0	21.6	-49.4		33.7	582.7	249.3	15.4	1.000007
86500.0	21.1	-48.8		32.8	583.5	253.8	15.5	1.000007
87000.0	20.6	-48.2		32.0	584.3	260.1	15.2	1.000007
87500.0	20.2	-47.5		31.1	585.2	266.6	15.1	1.000007
88000.0	19.7	-47.2		30.4	585.9	272.3	11.1	1.000007
88500.0	19.3	-47.1		29.7	585.7	284.4	7.1	1.000007
89000.0	18.8	-47.0		29.0	585.9	305.5	4.4	1.000006
89500.0	18.4	-46.9		28.4	586.0	301.1	3.5	1.000006
90000.0	18.0	-46.8		27.7	586.1	293.8	2.6	1.000006
90500.0	17.6	-46.5		27.0	586.5	290.0	3.8	1.000006
91000.0	17.2	-46.7		26.3	587.6	274.5	6.6	1.000006
91500.0	16.8	-44.9		25.7	588.6	272.3	9.4	1.000006
92000.0	16.4	-44.0		25.0	589.7	278.6	12.1	1.000006
92500.0	16.1	-43.2		24.4	590.7	283.8	14.8	1.000005
93000.0	15.7	-42.7		23.8	591.4	287.1	17.3	1.000005
93500.0	15.4	-43.0		23.3	591.0	288.1	17.8	1.000005
94000.0	15.0	-43.3		22.8	590.6	289.1	18.2	1.000005
94500.0	14.7	-43.7		22.3	590.1	289.1	18.2	1.000005
95000.0	14.4	-44.0		21.8	589.7	287.4	17.5	1.000005
95500.0	14.0	-44.3		21.4	589.3	285.7	16.8	1.000005
96000.0	13.7	-44.1		20.9	589.9	281.2	16.5	1.000005
96500.0	13.4	-43.8		20.4	589.9	275.3	16.5	1.000005
97000.0	13.1	-43.5		19.9	590.3	269.4	16.7	1.000004
97500.0	12.8	-43.0		19.4	591.0	259.1	17.2	1.000004
98000.0	12.6	-41.8		18.9	592.5	247.9	18.3	1.000004
98500.0	12.3	-40.6		18.4	594.1	238.4	20.1	1.000004
99000.0	12.0	-39.4		17.9	595.7	237.3	23.4	1.000004
99500.0	11.8	-38.1		17.4	597.3	239.7	27.6	1.000004
100000.0	11.5	-36.9		17.0	598.8	241.5	31.8	1.000004
100500.0	11.3	-36.3		16.6	599.5	245.2	37.0	1.000004
101000.0	11.0	-36.2		16.2	599.7	249.7	43.2	1.000004
101500.0	10.8	-36.1		15.8	599.8	253.1	49.6	1.000004
102000.0	10.5	-36.0		15.5	600.0	255.5	54.1	1.000003
102500.0	10.3	-35.9		15.1	600.1	257.2	54.8	1.000003
103000.0	10.1	-35.7		14.8	600.3	259.0	55.6	1.000003
103500.0	9.9	-35.8		14.5	600.2	260.8	56.0	1.000003

STATION ALTITUDE 4051.00 F MSL
30 OCT. 82
ASCENSION NO. 105

UPPER AIR DATA
3030000105
JALLEN
TABLE 10 CONT.

GEOMETRIC ALTITUDE 4051.00 F MSL
30 OCT. 82
ASCENSION NO. 105

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GEOMETRIC METER	SEA LEVEL DENSITY KILOGRAMS PER CUBIC METER	DIRECTION OF WIND DEGREES (IND)	WIND SPEED KNOTS	INDEX OF REFRACTION
104000.0	9.7	-35.9			14.2	000.0	203.2	54.4	1.0000003
104500.0	9.5	-36.1			13.9	000.0	203.7	53.0	1.0000003
105000.0	9.3	-36.2			13.6	000.7	208.3	51.9	1.0000003
105500.0	9.1	-36.4			13.3	000.0	209.0	54.5	1.0000003
106000.0	8.9	-36.5			13.0	000.0	209.7	57.0	1.0000003
106500.0	8.7	-36.7			12.8	000.1	210.3	56.5	1.0000003
107000.0	8.5	-36.8			12.5	000.0	211.1	59.2	1.0000003
107500.0	8.3	-37.0			12.2	000.0	212.0	58.0	1.0000003
108000.0	8.1	-37.1			11.9	000.0	212.8	57.0	1.0000003
108500.0	7.9	-37.3			11.7	000.4	212.7	59.6	1.0000003
109000.0	7.8	-37.4			11.5	000.2	212.3	56.7	1.0000003
109500.0	7.6	-37.5			11.2	000.6	211.6	60.9	1.0000003
110000.0	7.4	-37.7			11.0	000.0			1.0000012
110500.0	7.3	-37.6			10.8	000.0			1.0000002
111000.0	7.1	-38.0			10.6	000.4			1.0000002
111500.0	7.0	-38.1			10.3	000.0			1.0000002
112000.0	6.8	-38.1			10.1	000.0			1.0000002

STATION ALTITUDE 4051.00 FEET MSL
30 OCT. 62 1530 MDT
ASCENSION I.O. 165

HAZARD DATA LEVELS
3030030165
JALLFRI
TABLE 11

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEW POINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4869.	18.1	-1.2	27.	181.5	0.0
800.0	6559.	15.4	-2.4	29.	222.7	10.3
750.0	8339.	11.1	-5.5	31.	243.8	14.4
700.0	10221.	9.9	-2.4	42.	261.2	17.2
650.0	12217.	3.5	-7.5	44.	257.5	22.4
600.0	14335.	.5	-12.2	38.	252.5	20.5
550.0	16608.	-3.8	-21.2	24.	264.6	12.5
500.0	19052.	-9.5	-24.2	29.	244.4	13.9
450.0	21606.	-14.6	-29.4	27.	247.9	25.8
400.0	24596.	-20.2	-30.0	41.	259.1	20.9
350.0	27792.	-28.0	-39.0	34.	238.1	26.7
300.0	31358.	-36.9	-46.9	34.	243.7	23.9
250.0	35407.	-47.4			249.0	21.7
200.0	40115.	-59.8			267.4	24.2
175.0	42821.	-64.8			271.1	23.4
150.0	45874.	-69.3			272.7	24.4
125.0	49434.	-69.8			275.1	26.3
100.0	53829.	-66.8			278.0	16.2
80.0	58292.	-63.4			253.7	13.4
70.0	61002.	-62.4			264.7	14.0
60.0	64125.	-60.1			253.7	16.3
50.0	67897.	-57.8			22.1	2.8
40.0	72536.	-54.6			211.1	5.8
30.0	78624.	-51.2			313.2	10.3
25.0	82503.	-52.4			262.2	9.0
20.0	87282.	-47.3			268.0	14.0
15.0	93580.	-43.4			269.1	16.2
10.0	102660.	-35.7			259.5	55.9
7.0	110757.	-38.1				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4940.00 FEET MSL
30 OCT. #2
ASCENSION NO. 49

STATIONARY LEVEL DATA
3030040049
STALLION
TABLE 12

MODELIC COORDINATES
33.01920 LAT DEG
106.66501 LON DEG

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	DEWPOINT DEGREES	REL. HUM. PERCENT
846.2	4940.0	17.5	-2.7	25.0
844.3	5003.2	19.1	-3.1	22.0
828.7	5528.5	19.1	-3.1	22.0
776.0	7365.2	14.6	-0.3	23.0
762.5	7851.3	13.8	-0.4	24.0
700.0	10188.2	6.9	-9.4	30.0
684.0	10910.8	5.5	-10.3	31.0
630.3	12649.6	.0	-12.6	38.0
623.7	13258.5	-0.3	-12.9	38.0
598.9	14324.4	-0.8	-10.8	24.0
582.3	15060.7	-1.7	-23.5	17.0
532.9	17359.5	-6.3	-24.5	22.0
500.0	18983.6	-11.0	-27.5	24.0
470.2	20520.1	-14.3	-29.1	27.0
455.2	21333.3	-15.3	-30.0	27.0
433.0	22570.1	-17.7	-30.0	33.0
430.7	22701.1	-18.2	-30.8	32.0
424.8	23039.5	-19.1	-20.2	33.0
418.4	23410.9	-19.0	-24.8	63.0
400.0	24506.5	-21.4	-27.4	56.0
388.2	25230.6	-23.3	-29.2	58.0
381.3	25662.0	-24.0	-31.0	49.0
362.9	26844.1	-26.5	-35.5	42.0
347.4	27876.5	-20.2	-30.0	42.0
329.7	29101.4	-31.2	-42.1	33.0
300.0	31277.9	-36.0	-47.2	33.0
290.1	32039.2	-38.0	-49.0	33.0
250.0	35337.2	-47.7		
222.5	37830.9	-53.9		
200.0	40062.1	-59.8		
191.6	40943.3	-60.9		
167.6	43638.0	-68.2		
150.0	45818.9	-70.9		
141.3	46980.3	-72.0		
131.0	48440.6	-72.3		
126.8	49082.7	-67.8		
114.3	51128.4	-68.4		
105.5	52525.6	-68.7		
100.0	53766.9	-69.6		
96.6	54451.2	-67.3		

GEODETIC COORDINATES
33.81920 LAT DEG
100.00501 LON DEG

SIGNIFICANT LEVEL DATA
3020040049

STATION

TABLE 12 CONT'D

STATION ALTITUDE 4940.00 FEET MSL
30 OCT. 82
ASCENSION NO. 49

1730 MDT

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
95.1	54764.9	-64.1		
80.8	58067.0	-62.9		
70.0	60969.8	-64.9		
57.8	64832.6	-64.5		
55.0	65847.1	-64.6		
50.0	67816.4	-59.6		
46.2	69445.6	-60.7		
40.4	72230.1	-56.7		
35.0	75231.4	-57.5		
30.0	78469.4	-55.0		
25.5	81904.0	-55.0		

STATION ALTITUDE 4940.00 FEET MSL
30 OCT. 82
ASCENSION NO. 49

UPPER AIR DATA
3030000049
STATION
TABLE 13

GEODETIC COORDINATES
33.01920 LAT DEG
106.00501 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METEC	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
4940.0	840.2	17.5	-2.7	25.0	1012.0	664.9	180.0	1.000248
5000.0	844.4	19.0	-3.1	22.1	1004.6	660.0	181.0	1.000245
5500.0	829.5	19.1	-3.1	22.0	980.6	666.7	171.0	1.000241
6000.0	814.8	17.9	-3.9	22.3	973.1	665.4	176.8	1.000237
6500.0	800.4	16.7	-4.8	22.5	960.0	664.0	180.0	1.000233
7000.0	786.2	15.5	-5.0	22.8	947.0	662.0	180.1	1.000229
7500.0	772.2	14.4	-6.3	23.3	933.9	661.2	195.0	1.000226
8000.0	758.4	13.4	-6.6	24.4	920.4	660.0	203.2	1.000222
8500.0	744.6	11.9	-7.1	25.7	908.4	658.3	211.0	1.000219
9000.0	731.1	10.4	-7.8	26.9	896.0	656.6	217.8	1.000216
9500.0	717.9	8.9	-8.5	28.2	885.0	654.9	224.4	1.000213
10000.0	704.8	7.5	-9.2	29.5	873.6	653.1	232.0	1.000209
10500.0	691.9	6.2	-9.8	30.5	861.5	651.6	241.9	1.000206
11000.0	679.2	4.9	-10.5	31.7	849.5	650.2	252.8	1.000203
11500.0	666.5	3.4	-11.0	33.6	838.2	648.4	260.8	1.000200
12000.0	654.1	1.9	-11.7	35.5	827.1	646.6	264.7	1.000197
12500.0	641.9	.4	-12.4	37.4	816.2	644.8	267.0	1.000194
13000.0	629.9	-2.2	-12.7	38.0	802.7	644.1	268.5	1.000190
13500.0	618.0	-4.4	-14.0	34.8	788.4	643.8	268.1	1.000186
14000.0	606.3	-6.6	-16.7	28.3	774.4	643.4	267.8	1.000181
14500.0	594.9	-1.0	-19.8	22.3	760.9	642.9	265.9	1.000176
15000.0	583.7	-1.6	-23.0	17.6	748.4	642.1	263.9	1.000172
15500.0	572.5	-2.6	-23.6	18.0	736.7	641.0	261.8	1.000169
16000.0	561.6	-3.6	-23.8	19.0	725.3	639.8	257.3	1.000166
16500.0	550.9	-4.6	-24.0	20.1	714.1	638.6	251.8	1.000164
17000.0	540.3	-5.6	-24.3	21.2	703.1	637.4	246.9	1.000161
17500.0	530.0	-6.7	-24.7	22.2	692.5	636.1	247.2	1.000159
18000.0	519.7	-8.2	-25.7	22.8	682.8	634.4	249.8	1.000156
18500.0	509.6	-9.6	-26.6	23.4	673.2	632.6	249.7	1.000154
19000.0	499.7	-11.0	-27.5	24.0	663.8	630.9	249.1	1.000151
19500.0	489.8	-12.1	-28.0	25.0	653.4	629.0	247.8	1.000149
20000.0	480.2	-13.2	-28.6	26.0	643.1	628.3	246.7	1.000146
20500.0	470.7	-14.2	-29.1	26.9	633.0	627.0	245.8	1.000144
21000.0	461.3	-14.9	-29.6	27.0	622.0	626.2	244.3	1.000142
21500.0	452.1	-15.6	-30.0	27.8	611.4	625.3	242.6	1.000139
22000.0	443.1	-16.6	-30.0	30.2	601.4	624.1	242.4	1.000137
22500.0	434.2	-17.6	-30.0	32.7	591.0	623.0	242.9	1.000135
23000.0	425.5	-19.0	-26.7	50.6	582.8	621.3	244.4	1.000134
23500.0	416.9	-19.7	-25.0	62.6	572.7	620.4	246.4	1.000132
24000.0	408.4	-20.6	-26.2	60.3	562.9	619.4	246.7	1.000130

GEOMETRIC COORDINATES
33.81920 LAT DEG
106.88501 LONG DEG

UPPER AIR DATA
3030040049
STALLION
TABLE 13 CONT'D

STATION ALTITUDE 4940.00 FEET MSL
30 OCT. #2
ASCENSION NO. 49

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
24500.0	400.1	-21.4	58.0	553.3	615.5	240.0	27.8	1.000127
25000.0	391.9	-22.7	58.0	544.6	610.7	247.4	28.5	1.000125
25500.0	383.9	-23.7	52.4	535.9	615.4	248.5	29.2	1.000122
26000.0	375.9	-24.7	47.0	527.0	614.2	248.1	29.8	1.000120
26500.0	368.2	-25.8	44.0	518.3	612.8	247.5	30.4	1.000117
27000.0	360.5	-26.9	42.0	509.9	611.4	245.7	30.6	1.000115
27500.0	353.0	-28.2	42.0	501.9	609.8	240.1	31.2	1.000113
28000.0	345.6	-29.4	41.1	493.6	605.3	239.7	31.8	1.000111
28500.0	338.3	-30.2	37.4	485.0	607.3	239.6	32.4	1.000109
29000.0	331.1	-31.0	33.7	476.4	600.2	241.2	32.7	1.000107
29500.0	324.0	-32.2	33.0	468.5	604.7	242.3	32.9	1.000105
30000.0	317.1	-33.6	33.6	461.0	603.1	242.3	32.6	1.000103
30500.0	310.3	-34.9	33.0	453.6	601.4	242.3	32.4	1.000102
31000.0	303.6	-36.2	33.0	446.3	599.3	242.3	32.3	1.000100
31500.0	297.1	-37.5	33.0	439.1	596.1	241.6	32.4	1.000098
32000.0	290.6	-38.8	33.0	431.9	590.4	240.6	32.6	1.000097
32500.0	284.1	-40.1	28.4**	424.7	594.7	240.3	32.2	1.000095
33000.0	277.8	-41.5	23.4**	417.7	593.0	240.3	31.8	1.000093
33500.0	271.6	-42.8	18.4**	410.7	591.5	241.2	32.2	1.000092
34000.0	265.5	-44.1	13.4**	403.9	589.6	241.9	32.5	1.000090
34500.0	259.6	-45.5	8.4**	397.2	587.8	242.0	32.5	1.000089
35000.0	253.8	-46.8	3.4**	390.7	586.1	242.1	32.1	1.000087
35500.0	248.1	-48.1		384.1	584.4	242.1	31.1	1.000086
36000.0	242.4	-49.3		377.3	582.8	242.9	30.4	1.000084
36500.0	236.8	-50.6		370.7	581.2	244.9	30.3	1.000083
37000.0	231.4	-51.8		364.1	579.6	247.7	30.0	1.000081
37500.0	226.0	-53.1		357.8	578.0	251.6	29.4	1.000080
38000.0	220.8	-54.3		351.5	576.3	254.4	28.4	1.000078
38500.0	215.5	-55.7		345.2	574.5	255.6	26.5	1.000077
39000.0	210.4	-57.0		339.1	572.8	255.8	24.9	1.000076
39500.0	205.5	-58.3		333.2	571.0	255.0	23.4	1.000074
40000.0	200.6	-59.6		327.3	569.3	253.0	23.8	1.000073
40500.0	195.8	-60.3		320.5	568.3	250.8	24.8	1.000071
41000.0	191.1	-61.1		313.8	567.4	250.3	24.1	1.000070
41500.0	186.4	-62.4		308.1	565.6	249.8	23.3	1.000069
42000.0	181.8	-63.8		302.5	563.7	255.7	23.4	1.000067
42500.0	177.3	-65.1		297.0	561.9	263.1	24.3	1.000066
43000.0	173.0	-66.5		291.6	560.1	268.3	25.4	1.000065
43500.0	168.8	-67.8		286.3	558.2	270.1	26.7	1.000064
44000.0	164.5	-68.6		280.3	557.1	271.7	27.9	1.000062

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4940.00 FEET MSL
30 OCT. 82 1730 MDT
ASCENSION NO. 49

UPPER AIR DATA
3030040044
STATION

GEODETIC COORDINATES
33.61920 LAT DEG
106.66501 LONG DEG

TABLE 13 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CM ³ METEC	SPEED OF SOUND KNOTS	WIND DIRECTION (IN) KNOTS	INDEX OF REFRACTION
44500.0	160.4	-69.4		274.1	550.3	270.4	1.000061
45000.0	150.4	-69.9		260.0	550.4	268.9	1.000060
45500.0	152.5	-70.5		262.1	554.0	267.6	1.000058
46000.0	148.6	-71.2		250.3	553.0	266.5	1.000057
46500.0	144.8	-72.0		240.9	552.5	265.2	1.000056
47000.0	141.2	-72.8		245.4	551.4	263.6	1.000055
47500.0	137.6	-72.6		239.0	551.7	263.4	1.000053
48000.0	134.1	-72.5		232.7	551.9	263.3	1.000052
48500.0	130.6	-72.1		220.4	552.4	263.3	1.000050
49000.0	127.3	-70.1		218.5	553.1	263.3	1.000049
49500.0	124.1	-69.5		212.4	555.9	263.4	1.000047
50000.0	121.0	-69.2		200.7	550.4	263.6	1.000046
50500.0	118.0	-68.8		201.2	550.9	271.2	1.000045
51000.0	115.0	-68.5		195.8	557.3	262.6	1.000044
51500.0	112.2	-68.5		190.9	557.3	269.6	1.000043
52000.0	109.4	-68.0		180.3	557.2	292.2	1.000041
52500.0	106.6	-68.7		181.7	557.1	290.2	1.000040
53000.0	104.0	-69.0		177.4	556.0	276.1	1.000040
53500.0	101.4	-69.4		173.3	556.1	265.3	1.000039
54000.0	98.8	-68.8		168.5	550.9	265.1	1.000038
54500.0	96.4	-68.8		162.7	559.0	264.8	1.000036
55000.0	94.0	-64.0		150.0	563.4	257.3	1.000035
55500.0	91.7	-63.8		152.0	563.6	248.0	1.000034
56000.0	89.5	-63.7		143.6	563.9	249.6	1.000033
56500.0	87.3	-63.5		145.0	564.1	255.6	1.000032
57000.0	85.2	-63.3		141.4	564.4	261.0	1.000031
57500.0	83.1	-63.1		137.6	564.6	265.8	1.000031
58000.0	81.1	-62.9		134.3	564.9	270.2	1.000030
58500.0	79.1	-63.2		131.2	564.5	274.5	1.000029
59000.0	77.2	-63.5		128.2	564.0	278.7	1.000029
59500.0	75.3	-63.9		125.3	563.0	281.9	1.000028
60000.0	73.4	-64.2		122.5	563.1	285.4	1.000027
60500.0	71.6	-64.6		119.7	562.0	281.9	1.000027
61000.0	69.9	-64.9		116.9	562.2	276.3	1.000026
61500.0	68.2	-64.8		114.0	562.3	269.0	1.000025
62000.0	66.5	-64.7		111.2	562.4	258.8	1.000025
62500.0	64.9	-64.7		108.4	562.5	255.9	1.000024
63000.0	63.3	-64.6		105.7	562.0	267.1	1.000024
63500.0	61.7	-64.5		103.1	562.7	277.9	1.000023
64000.0	60.2	-64.4		100.5	562.8	259.1	1.000022

STATION ALTITUDE 4440.00 FEET MSL
30 OCT. 82
ASCENSION NO. 44

UPPER AIR DATA
3030040049
STALLION

TABLE 13 CONT'D

GEODETIC COORDINATES
33.61920 LAT DEG
106.00501 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES, CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
64500.0	58.8	-74.4		93.0	562.4	290.0	12.8	1.000022
65000.0	57.3	-63.5		95.3	564.1	311.6	11.6	1.000021
65500.0	55.9	-61.2		92.0	567.2	329.2	11.5	1.000020
66000.0	54.6	-59.6		89.1	569.3	342.7	10.2	1.000020
66500.0	53.3	-59.6		86.9	569.3	358.6	8.6	1.000019
67000.0	52.0	-59.6		84.9	569.3	10.4	6.7	1.000019
67500.0	50.8	-59.6		82.0	569.3	5.5	3.5	1.000018
68000.0	49.6	-59.7		80.9	569.1	324.8	1.1	1.000018
68500.0	48.4	-60.1		79.1	568.7	305.6	2.4	1.000018
69000.0	47.2	-60.4		77.3	568.2	300.4	3.6	1.000017
69500.0	46.1	-60.6		75.5	567.9	302.7	4.2	1.000017
70000.0	45.0	-59.9		73.5	568.9	305.0	4.6	1.000016
70500.0	43.9	-59.2		71.5	569.9	306.0	4.4	1.000016
71000.0	42.9	-58.5		69.0	570.9	306.0	3.9	1.000015
71500.0	41.8	-57.7		67.7	571.0	306.1	3.8	1.000015
72000.0	40.9	-57.0		65.8	572.7	304.6	4.2	1.000015
72500.0	39.9	-56.8		64.2	573.1	304.8	4.3	1.000014
73000.0	38.9	-56.9		62.7	572.9	312.1	3.3	1.000014
73500.0	38.0	-57.0		61.3	572.7	324.9	2.5	1.000014
74000.0	37.1	-57.2		59.9	572.5	284.0	2.7	1.000013
74500.0	36.2	-57.3		58.5	572.4	259.9	4.0	1.000013
75000.0	35.4	-57.4		57.2	572.2	250.6	5.5	1.000013
75500.0	34.6	-57.3		55.8	572.4	247.2	7.0	1.000012
76000.0	33.7	-56.9		54.4	572.9	245.0	8.4	1.000012
76500.0	32.9	-56.5		53.0	573.4	248.7	9.5	1.000012
77000.0	32.2	-56.1		51.6	573.9	251.7	10.7	1.000012
77500.0	31.4	-55.7		50.3	574.4	256.4	11.9	1.000011
78000.0	30.7	-55.4		49.1	574.9	262.2	13.4	1.000011
78500.0	30.0	-55.0		47.8	575.4	266.9	14.9	1.000011
79000.0	29.3	-55.0		46.7	575.4	262.1	13.8	1.000010
79500.0	28.6	-55.0		45.6	575.4	256.4	12.8	1.000010
80000.0	27.9	-55.0		44.0	575.4			1.000010
80500.0	27.3	-55.0		43.5	575.4			1.000009
81000.0	26.6	-55.0		42.5	575.4			1.000009
81500.0	26.0	-55.0		41.5	575.4			1.000009

STATION ALTITUDE 6400.00 FEET SL
30 OCT. 82 1730 MOT
ASCENSION NO. 49

MANDATORY LEVELS
303004004,
STATION
TABLE 14

GEODETIC COORDINATES
33.61920 LAT DEG
106.00501 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	ALT DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES (TN)	SPEED KNOTS	
600.0	6513.	16.7	-4.0	25.	180.1	14.8	
750.0	8301.	12.5	-6.0	25.	208.4	17.3	
700.0	10179.	6.9	-9.4	30.	235.9	17.1	
650.0	12159.	1.4	-11.9	36.	265.7	17.4	
600.0	14261.	-2.2	-18.5	25.	265.7	24.1	
550.0	16526.	-4.7	-24.0	20.	251.4	18.5	
500.0	18959.	-11.0	-27.5	24.	249.2	19.8	
450.0	21588.	-15.9	-30.6	28.	242.3	25.5	
400.0	24469.	-21.4	-27.4	50.	246.0	27.8	
350.0	27654.	-28.7	-37.0	42.	239.9	31.4	
300.0	31219.	-36.9	-47.2	33.	242.1	32.3	
250.0	35264.	-47.7			242.1	31.4	
200.0	39170.	-59.0			252.8	23.9	
175.0	42675.	-65.8			260.7	24.9	
150.0	45711.	-70.9			266.9	24.9	
125.0	49228.	-69.6			263.4	32.5	
100.0	53608.	-69.6			265.2	18.4	
80.0	58085.	-63.0			272.3	16.8	
70.0	60769.	-64.9			270.9	12.3	
60.0	63858.	-64.4			290.0	10.8	
50.0	67571.	-59.6			354.1	1.7	
40.0	72150.	-56.6			303.9	4.5	
30.0	78146.	-55.0			260.3	14.7	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

END

FILMED

2-83

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